

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year Semester-III

March 2021 Examination

B.Sc. Respiratory Care Technology

Time: 3 Hrs.

Paper – I

[Max. Marks: 100]

Applied Pathology & Microbiology

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Applied Pathology (50 Marks)

Q.P Code :J3855

LONG ESSAY

2 X 10 = 20 Marks

1. Define atherosclerosis and describe the risk factors, etiopathogenesis, clinical features and morphology of atherosclerosis ?
2. Define and Classify anemia? Describe the etiopathogenesis and laboratory findings in iron deficiency anemia ?

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Describe the laboratory findings in Acute Myeloid Leukemia ?
4. Describe the pathophysiology of heart failure ?
5. Define cardiac hypertrophy and list the etiology for right and left ventricular hypertrophy ?
6. Classify Congenital heart diseases and describe tetralogy of fallot?
7. Describe the etiopathogenesis and laboratory findings in immune thrombocytopenic purpura?

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. List the laboratory findings in Myocardial Infarction
9. Describe the morphology of heart in hypertensive heart disease
10. List 06 acquired valvular heart disease
11. List 03 types of pericardial effusion with their etiology
12. List 03 causes for microcytic hypochromic anemia
13. List the laboratory investigations used in bleeding disorder
14. Classify aneurysms

Section – B

Applied Microbiology (50 Marks)

Q.P Code : J3856

(Use separate answer booklet for Section-B)

LONG ESSAY

2 X 10 = 20 Marks

1. Define and Enumerate the various causative agents of catheter associated urinary tract infection. Discuss in detail the predisposing factors and infection control and preventive measures of Catheter associated urinary tract infection (2+3+5)
2. Define the term multidrug resistance in microorganisms. Discuss in detail the risk factors and preventive measures for occurrence of multidrug resistance organism (2+4+4)

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Clostridium difficile: Disease caused by, Risk factors and its preventive measures
4. Define Ventilator associated Pneumonia, agents causing VAP and its preventive measures
5. The impact and cost attributed to Health care associated infection
6. Biomedical waste management in health care settings
7. Blood borne pathogens: risk factors and its preventive measures

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. Steps of hand hygiene
9. Name 3 organisms transmitted to health care workers through feco oral route
10. Mention 3 vaccines recommended for health care workers
11. Mention three routes of transmission of infection
12. Mention 3 indications for Microbiological surveillance of ICU
13. Three indications for isolation of patients
14. Mention three personal protective equipment



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B.Sc. Respiratory Care Technology

Time : 3 Hrs.

Paper – II

[Max. Marks : 100]

Introduction to Respiratory care Technology

Q.P Code : J3860

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Write a detailed assessment of respiratory system. Briefly describe the abnormal breath sounds.
2. Write a detailed assessment of neurological system.

Short essay (Any ten)

10 X 5 = 50 Marks

3. Explain the isolation precautions for airborne disease.
4. Explain the complete steps of handwashing.
5. Write the procedure of recording blood pressure using a sphygmomanometer.
6. Describe the topographical landmarks of thorax.
7. Describe the symptoms of cardiovascular disease.
8. Briefly describe the assessment of abdomen.
9. Add a note on examination of precordium.
10. Describe the percussion of respiratory system.
11. How do you assess the sensorium in a patient? Explain
12. What are the usual abnormal findings in the assessment of skin and extremities?
13. Add a note on general appearance of the patient.
14. Describe the professional etiquettes to be followed during patient communication.

Short Answers (Any ten)

10 X 3 = 30 Marks

15. Describe the proper method of wearing gloves.
16. Give one example of closed ended question in patient communication.
17. Add a note on checking pulse.
18. Define bradycardia.
19. Mention the topographical landmarks of thorax.
20. List the various cardiovascular disorders.
21. List the abnormal findings in neurological examination of patient.
22. List the muscles of respiration.
23. list the abnormal breath sounds.
24. Mention the accessory muscles of respiration.
25. Mention the abnormal findings in examination of the abdomen.
26. Define tachypnoea.



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B.Sc. Allied Health Sciences Second Year (Semester-III)

March 2021 Examination

B.Sc. Respiratory Care Technology

Time : 2 hrs

[Max. Marks : 40]

Subject : Applied Pharmacology

Q.P Code : J3870

*Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.*

LONG ESSAY

1 X 10 = 10 Marks

1. Classify adrenergic receptor blockers. Explain the mechanism, uses and contraindications of propranolol (3+2+3+2)

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

2. Explain the mechanism, uses and adverse effects of amlodipine (1.5+2+1.5)

3. Explain the mechanism of action, uses and adverse effects of thiazide (1+2+2)

4. List the crystalloids and colloids and write their uses (2+3)

5. Explain the mechanism, uses and precautions to be taken while using dopamine (1.5+2+1.5)

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

6. Write the mechanism of action and two uses of streptokinase.

7. Explain tolerance and dependence with examples.

8. Mention the targets of drug action with examples.

9. Write three uses and three adverse effects of ramipril.

10. Write the mechanism of action and uses of clopidogrel.

11. Explain enzyme induction with examples.



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B.Sc. Respiratory care Technology

Time : 2.30 Hrs.

[Max. Marks : 80]

PAPER-IV

Medicine Relevant to Respiratory care Technology

Q.P Code : J3880

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

Long Essay

2X10=20 Marks

1. Define poliomyelitis. Explain the pathophysiology, risk factors and management of poliomyelitis.
2. With a neat labelled diagram explain the pathophysiology of myasthenia gravis. Mention the clinical features and describe the management.

Short Essay (Answer any Six)

6X5=30 Marks

3. Explain the pathophysiology of ischemic heart disease.
4. Explain the causes of type 2 respiratory failure.
5. Describe the pathophysiology of bronchial asthma.
6. Draw a neat labelled diagram of HIV virus. List the route of transmission of the virus.
7. Discuss the clinical features of COPD.
8. Describe the respiratory complications in children.
9. Describe the diseases associated with elderly patient.
10. Discuss the management of status epilepticus.

Short Answers (Answer any ten)

10X3=30 Marks

11. Mention signs and symptoms of HIV.
12. Discuss the etiology of sepsis.
13. Describe the diagnosis of HIV infection.
14. Mention the features of septic shock.
15. Mention the brief management of status epilepticus.
16. Describe the etiology of COPD.
17. Define tensilon test.
18. List the classic features of organophosphorus poisoning.
19. List the risk factors causing poliomyelitis.
20. Describe alveolar hypoventilation in respiratory failure.
21. List the clinical features of emphysema.
22. Describe management of diabetes mellitus.

